Safety-Kleen Systems, Inc.
Hebron Recycle Center
Federal Equipment Leaks Standard
Monitoring Report

MSA / PID Performance Evaluation

Instrument: MSA Passport PID II Organic Vapor Monitor, S/N: PPII 00914
Calibration Precision: Per Method 21, section 4.4.1 (do every 3 months, per Method 21, 4.4.2, must be <10%))
Response Time: Per Method 21, 4.4.3. (repeat when pump or flow configuration may be changed, must be <30 sec.)

DATE OF PERFORMANCE EVALUATION	PRINT NAME	SIGNATURE	RESULTS

PLEASE KEEP CALIBRATION LOG WITH THE YEARS MONITORING REPORTS.

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Calibration Precision:

1. Calibrate instrument with calibration gas.
2. Start instrument.
3. When instrument reads less than 1 ppm, introduce calibration gas.
4. Take reading when reading is stabilized (about 90 secs.)
5. Disconnect calibration gas, and allow reading return to near zero.
6. Repeat 3, 4, and 5 two more times.
7. Add the 3 readings and deduct from 3x the value of calibration gas.
8. Divide this difference by 3, and the value of the calibration gas, and multiply by 100%
9. Result must be less than or equal to 10%.
10. Report on log sheet.

Example: Cal. gas = 100 ppm. 1st reading = 99.8 ppm, 2nd reading = 99.0 ppm, 3rd reading = 100.1 ppm.

$$\text{Calibration Precision} = \frac{\{(99.8 + 99.0 + 100.1) - (3)(100)\}}{(3)(100)} (100\%) = 0.4\%$$

Response Time:

1. Calibrate instrument with calibration gas.
2. Start instrument.
3. When instrument reads less than 1 ppm, introduce calibration gas.
4. As soon as calibration gas starts to flow in flow indicator on regulator, start timing.
5. Watch meter reading. When reading is 90% of calibration gas value, note time elapsed.
6. Disconnect calibration gas, and allow reading return to near zero.
7. Repeat 4, 5, and 6 two more times.
8. Average the three times. Must be 30 seconds or less.
9. Report on log sheet.

Example:

Sample Gas = 100 ppm. Measure time from reading at ~ 0 ppm to 90 ppm.
1st reading = 27.3 seconds, 2nd reading = 26.4 seconds, 3rd reading = 28.0 seconds

Response Time = (27.3 + 26.4 + 28.0) / 3 = 27.2 seconds